

KOLEYEV, I. (g.Aktyubinsk)

Following the advice of efficiency experts. Prem.Keep.no.8:35 Ag '56.  
(Aktyubinsk--Cooperative societies) (MIRA 9:10)

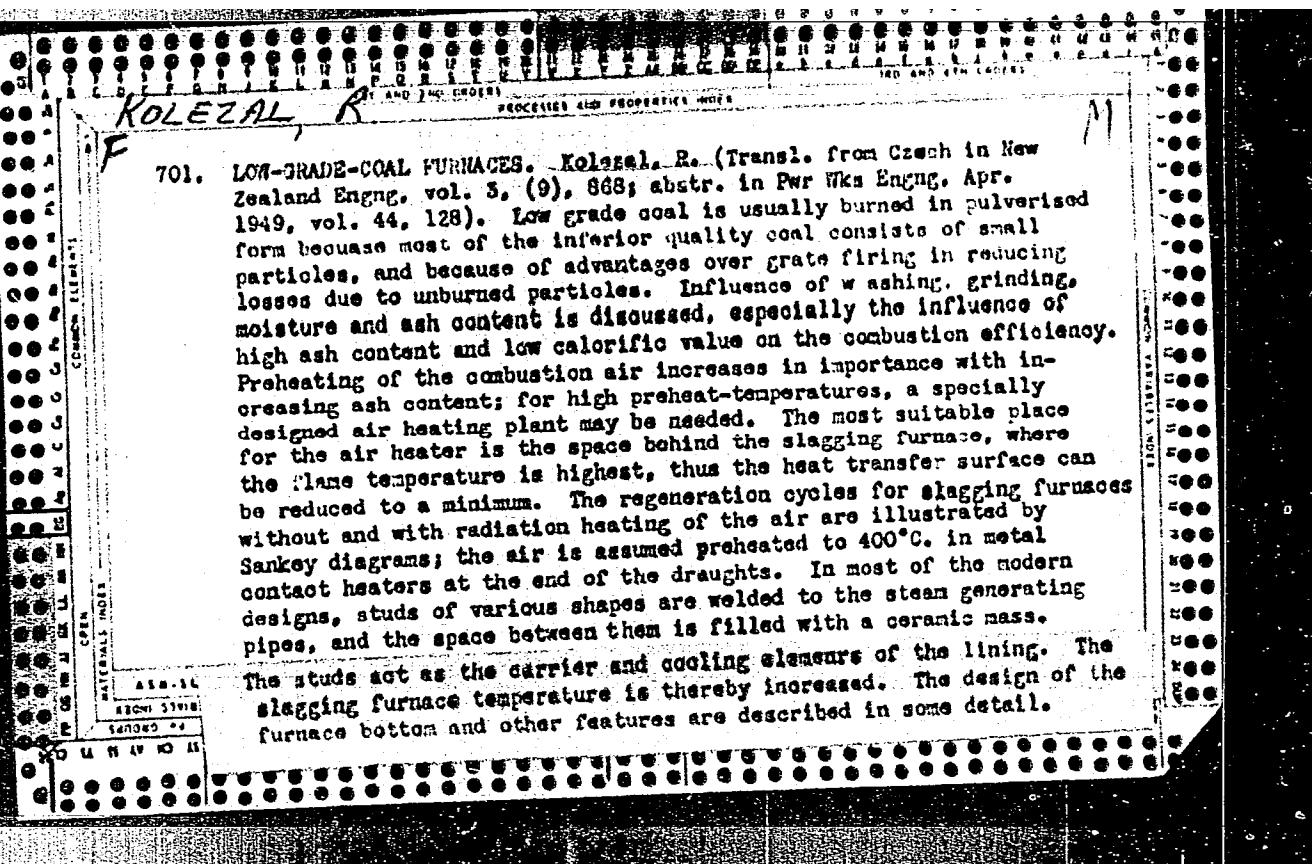
KOLEYNIK, F.R.

Screw setting for cross-cut and whip cut saws and jig saws. Rats.  
1 izobr. predl. v stroi. no.103:3-4 '54. (MLRA 8:11)  
(Saws)

KOLEZAL, J.

KOLEZAL, J. Polarographic and polarometric study of some noble metals. VII.  
Polarographic behavior of platinum. p. 349. Vol. 50, no. 3,  
Mar. 1956. CHEMICKE LISTY. Praha, Czechoslovakia.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957



L 09331-67

EWT(m)/EWP(t)/ETI

IJP(c) JD

ACC NR: AP6029522

SOURCE CODE: UR/0432/66/000/004/0053/0055

AUTHOR: Kolozhuk, K. V.; Mayntronko, A. S.; Fedorov, G. A. (Candidate of physico-  
mathematical sciences)

ORG: None

TITLE: Pulse photoresistors made of cadmium-selenide single-crystals

SOURCE: Mekhanizatsiya i avtomatzatsiya upravleniya, no. 4, 1966, 53-55

TOPIC TAGS: photoelectric property, crystal growing, photoresistor,  
photoresistance, photoelectric cell, semiconductor single crystal, cadmium  
selenide, light pulse, light source / ISSh-100-2 light source

ABSTRACT: The photoelectric properties of CdSe single-crystals of a low photosensitivity were studied by the Semiconductor Institute of AN UkrSSR in connection with their eventual possible use as quick-response receivers of short light signals ( $10^{-6}$  to  $10^{-5}$  sec). A method of growing crystals from the vapor phase was applied for preparation of CdSe crystals. The integrating photosensitivity did not exceed  $10^{-4}$  to  $10^{-5}$  amp per lumen at 28 volts. An In + Ga eutectic was used for electrodes and a linear volt-ampere characteristic was obtained in the range of 0.1 and 100 v. A pulse light source of ISSh-100-2 type was used for producing light pulses of the order of  $2 \cdot 10^{-6}$  sec. The photocurrent attained was 30 to 40 ma at 70 v. The exponential current attenuation curve had a time constant of  $10^{-6}$  sec. Such a combination of a low-time constant and a high-percentage modulation of conductivity ( $10^4$  to  $10^6$  times) will permit the exposure of the CdSe cells

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UDC: 621.383.42

L 09334-67  
ACC NR: AP6029522

to light radiations as well as the use of them under dark conditions. It is estimated that in the light such a percentage modulation can be maintained at a pulse frequency limit of 200 kc, while in the dark, the calculated limit is 3 kc. The photo-pulse response is characterized by the pulse front (about 1 microsecond) and relaxation time (5 to 15 microseconds) shown in an oscillogram of Fig. 1. The typical characteristics

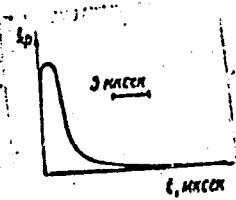


Fig. 1

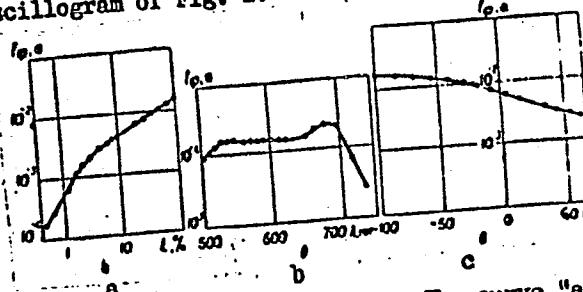


Fig. 2

obtained for CdSe photocells are shown in three curves of Fig. 2. The curve "a" represents a lux-ampere characteristic at 70 volts. The spectral characteristic is shown in the curve "b" while the third curve "c" demonstrates the dependence of the photo-current upon the temperature. Orig. art. has: 2 figures.

SUB CODE:

20/ SUBM DATE: None/ ORIG REF: 004

Contd:

2/2

KOLFMAN, Yu.A., inzh.

Work on the simplification of synchronous motor start  
systems. Prom. energ. 17 no. 6:26-31 Je '62. (MIRA 17:6)

PHASE I BOOK EXPLOITATION SOV/4540

Danilov, V.I., V.P. Dmitriyevskiy, N.L. Zaplatin, V.V. Kol'ga, Liu Nieh-ch'van,  
V.S. Rybalko, and L.A. Sarkisyan

Formirovaniye magnitnogo polya tsiklotrona s prostranstvennoy variatsiyey  
(Production of a Magnetic Field in a Cyclotron With Space Variation) Dubna  
[Izdatel'skiy otdel Ob'yedinenного instituta yadernykh issledovanii] 1959.  
27 p. 300 copies printed. [PHOTOCOPY]

Sponsoring Agency: Ob'yedinennyy institut yadernykh issledovaniy. Laboratoriya  
yadernykh problem.

Tech. Ed.: V.R. Sarantseva.

PURPOSE: The publication is intended for nuclear physicists.

COVERAGE: The book analyzes problems associated with the production of a magnetic  
field in a spiral cyclotron by a system of ring and spiral shims. Calculation  
of the magnetic field in a system of such shims was based on the assumption of

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## Production of a Magnetic Field (Cont.)

SOV/4540

uniform magnetization of their volume in the direction of the vertical component of the outer magnetizing field. Technical problems in construction of spiral shims and design characteristics of the pole terminals of the electromagnet are described. The author thanks V.P. Dzhesleyev, B.I. Zamolodchikov, L.V. Vasil'yev, Yu. N. Denisov, M.M. Semenov, K.A. Baycher, N.I. D'yakov, N.S. Matyukhin, and A.A. Oleynik. There are 22 references: 16 Soviet and 6 English.

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AVAILABLE: Library of Congress (QC787.C8D8)

Card 2/2

JA/dwm/gsp  
12-7-60

K<sub>6</sub> 11GA, U.U.

21(9) BOY/69-6-7/27  
**Authors:** Vasil'evskaya, D. P.; Glazov, A. A.; Danilov, V. I.; Denisov,  
 Yu. M.; Dubinov, V. P.; Dzatlyanskiy, V. P.; Zaslodobnikov,  
 N. I.; Zhdanov, A. A.; Kondratenko, V. P.; Kolodkin, V. A.;  
 Kostylev, V. S.; Kravtsov, A. L.; Kartseyan, L. A.  
**Title:** Putting into Operation a Cyclotron with a Spatially Varying  
 Magnetic Field (Japanese Electron Accelerator)  
 (Russian abstract)

**Periodicals:** Atomnaya energiya, 1959, Vol. 6, No. 6, pp. 657 - 658 (USA).

**Abstract:** In the present "Letter to the Editor" the authors report on some measurements and theoretical considerations concerning some parameters of the new cyclotron. In the Laboratory of nuclear problems of the Byelorussian Institute of the Joint Institute for Nuclear Research for Nuclear Problems of the Soviet Academy of Sciences was started in January 1959 this new type of cyclotron. It has an azimuthal and a radially periodically varying magnetic field. The diameter of the magnet of the accelerator is 1200 mm. The lines of constant field gradient have the shape of spirals of Archimedes,  $\rho = 16.2 \cdot r - 16.2$ . Periodicity of the field structures

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Fig. 6. The mean value of the field tension increases radially according to the relativistic mass increase of the accelerated ions. Since the acceleration originates from the center of the magnet the fundamental frequencies of the free oscillations change accordingly  $Q_0^* \propto Q$ ,  $Q_0^* = 1$  (at  $r=0$ ) to  $Q_0^* \approx Q_0$ ,  $Q_0 \approx 1.01$  (at  $r = 52$  cm). It was shown theoretically that the radial increase of the mean magnetic field tension which is necessary for the elimination of the nonlinear resonance effect occurring in the center of the accelerator may decrease with increasing  $Q$ , according to  $M_0^* \approx (B-1)$  and with an increase of the radial spacing in the case of a fixed  $B$  as  $(Q_0^*/\lambda)^{1/2}$ . These investigation results were taken into account in selecting the air-spiral structure of the magnetic field in the magnet of which no nonlinear resonance occurs. All measurements of the field tensions were carried out by means of a nuclear magnetometer (error  $\pm 1.5$ %). A resonance quarter-wave system with one phased electrode was used for the ion acceleration. In the cyclotron deacceleration

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Fig. 7. The particles were accelerated up to 12 Mev and de-accelerated up to 24 Mev at a constant amplitude of the acceleration tension on the drifts of 4 rev. The electrodes which were used for measuring the current in the case of a azimuthal orbital radius are briefly described. A picture shows the accelerating chamber of the cyclotron (Fig. 2), another one an autograph of a neutron beam in the case of different radii. The investigation results prove the possibility of producing a relativistic cyclotron with a proton energy which equals that of a modern phasotron. There are 2 figures and 2 references, 1 of which is Soviet.

SUMMITED: April 9, 1959

Card 3/3

150L GA, V.V.

PHASE I BOOK EXTRATION 807/5353

Pebeliotsev, G. N., ed.  
 Ukrzitpoli, Atomizdat (Accelerator), Collection of Articles  
 Accelerator, 1960. 122 p. Errata slip inserted. 5,000 copies printed.

Scientific Ed.: B.M. Fabilovskiy; Ed.: G.M. Pribil'skaya; Tech. Ed.: N.A. Vinograd.

**PERFOR:** This collection of articles is intended for scientists and engineers engaged in the construction and operation of particle accelerators.

**COVERAGE:** These original articles treat specific problems arising in the operation of present-day accelerators, particularly linear electron accelerators. A new accelerator put into operation at the Ulyanovsk Fiziko-tekhnicheskii Institut (Ulyanovsk Radioelectronics Institute) is described, and problems in the dynamics of particles in linear electron accelerators are discussed. New methods are discussed for the extraction of particles from accelerators. Problems associated with the shaping of permanent magnetic fields and the acceleration of multi-charged ions are also treated. The changeover of the series cyclotron to the phasotron acceleration mode with a view to increasing the energy of accelerated particles is described, and some problems connected with the bunching of particles are elaborated. No personalities are mentioned. References accompany each article.

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105 123

IMITRIYEVSKIY, V.P.; ZAMOLODCHIKOV, B.I.; KOL'GA, V.V.

[Cyclotron with a periodic magnetic field for  
multiply charged ions] TSiklotron s periodicheskim  
magnitnym polem dlja mnogoziariadnykh ionov. Moskva,  
Glav. upr. po ispol'zovaniyu atomnoi energii, 1960. 14 p.  
(MIRA 17:2)

*21.3300*S/058/61/000/007/006/086  
A001/A101

AUTHORS: Dmitriyevskiy, V.P., Zamolodchikov, B.I., Kol'ga, V.V.

TITLE: The cyclotron with a periodical magnetic field for multicharged ions

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 37, abstract 7B32 (v sb. "Uskoriteli", Moscow, Atomizdat, 1960, 94 - 104)

TEXT: A cyclotron is proposed with a periodical magnetic field with a purpose to produce beams of multicharged ions with a pulse of up to  $2 \times 10^6$  oe.cm and intensity of several tens of microamperes. General relations are derived and necessary voltages are calculated for accelerating ions with a prescribed range of charge-to-mass ratio. The vertical focusing is effected by the variable gradient of the magnetic field whose maxima are located on spiral lines. An appendix contains the sketchy calculation of an installation with the following characteristics: field in the accelerator center, 16,000 oersted; the final radius of ion motion, 130 cm; the range of charge-to-mass ratios, 1/3 to 1/7.

[Abstracter's note: Complete translation]

A. Talyzin

Card 1/1

*B*

21.2100

## AUTHORS:

Dmitrievskiy, V. P., Zamolodchikov, B. I., Kol'ga, V. V.

TITLE: Beam Loss at the Limiting Radius in a Proton Synchrotron 19

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 4, pp. 303 - 305

TEXT: In the present "Letter to the Editor", the authors discuss the resonance interaction between the radial and vertical oscillations near  $n = 0.25$ . This resonance is much more harmful than the parametric excitation of vertical oscillations caused by the first harmonic in the structure of the magnetic field. The limiting energy to which particles in a high-energy proton synchrotron may be accelerated corresponds to a radius for which the coefficient  $n = -(r/H)(dH/dr)$ , characterizing the decrease of the magnetic field, is in the range  $0.25 > n > 0.2$ . Coupled oscillations do not lead to a total beam loss in the range  $n=0.2$ . This range is followed immediately by the range of parametric excitation of vertical oscillations of frequency  $Q_z \sim 0.5$  ( $n=0.25$ ). This parametric excitation cannot cause any significant increase of the amplitude in a real

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84229  
S/089/60/009/004/009/020  
B006/B070

Beam Loss at the Limiting Radius in a Proton Synchrotron

84223  
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B006/B070

proton synchrotron. The effects which cause an increase of the amplitude of vertical oscillations in the presence of an azimuthal inhomogeneity of the magnetic field are now investigated. Coupled oscillations originating from a distortion of the closed orbits caused by an azimuthal inhomogeneity of the field structure are considered. Formulas are derived, which give the increase in the amplitude in the resonance zone for quasistatic (6) and dynamic (7) cases. The theoretical results were verified by means of an electronic simulator of the type ~~EMY-8~~ (EMU-8). This instrument integrated equation (2) describing the vertical oscillations. For this purpose, the equations were put in the form of a system of two equations (9), and the initial phase  $\varphi_0$  was so chosen that the maximum increase of the amplitude of the vertical oscillations occurred during the passage through the resonance at  $n_0 = 0.25$ . The maximum amplitude of the oscillation could be observed on the indicator screen, and was determined from the voltage at the output of the integrator. The accuracy of the solution was 1%. The system of equations (9) was solved for two special cases: the proton synchrotron of Ob'yedinenyyi institut yadernykh issledovaniy (Joint Institute of Nuclear Research) in Dubna, and that of

Card 2/3

KOL'GA, V.V.; SARANTSEVA, V.R., tekhn. red.

[Compensating nonlinear resonances in a relativistic cyclotron] Kompensatsiya nelineinykh rezonansov v relativisticheskem tsiklotrone. Dubna, Ob"edinennyi in-t iadernykh issl., 1962. 5 p.

(MIRA 15:4)

(Cyclotron resonance)

VASIL'YEVSKAYA, D.P.; GLAZOV, A.A.; DENISOV, Yu.N.; DZHELEPOV, V.P.;  
DMITRIYEVSKIY, V.P.; ZAMOLODCHIKOV, B.I.; ZAPLATIN, N.L.;  
KOL'GA, V.V.; KROPIN, A.A.; KUZMYAK, M.; ONISHCHENKO, L.N.;  
RYBALKO, V.S.; SARKISYAN, L.A.; SHVABE, Ye.; SARANTSEVA, V.R.,  
tekhn. red.

[Theory and the modeling of a circular synchro-cyclotron with  
a spiral magnetic field] Voprosy teorii i modelirovaniia kol'-  
tsevogo fazotrona so spiral'noi strukturoi magnitnogo polia.  
Dubna, Ob"edinenyi in-t iadernykh issl., 1962. 7 p.

(MIRA 15:4)

(Synchrotron)

GLAZOV, A.A.; DZHELEPOV, V.P.; DMITRIYEVSKIY, V.P.; ZAMOLODCHIKOV, B.I.;  
KOL'GA, V.V.; KROPIN, A.A.; ONISHCHENKO, L.M.; SHVABE, Ye.

Effect of a space charge on the frequency of free oscillations  
of particles in an isochronous cyclotron. Atom. energ. 15  
no.3:205-209 S '63. (MIRA 16:10)

(Cyclotron) (Oscillations)

L.58913-65 EWT(m)/EPA(w)-2/EHA(m)-2 Pt.-7 IJP(e) OS

ACCESSION NR: AT5007939

6/0000/64/000/000/0547/0555

AUTHOR: Glazov, A. A.; Denisov, Yu. N.; Dmitriyevskiy, V. P.; Zamolodchikov, B. I.;  
Zaplatin, N. L.; Kol'ga, V. V.; Konochkov, M. H.; Kropin, A. A.; Dzhelarov, V. P.;  
Gashev, M. A.; Malyshev, I. F.; Monoszon, N. A.; Popkovich, A. V.

TITLE: Relativistic 700-Kev proton cyclotron

40  
38  
B+1

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy.  
Moscow, Atomizdat, 1964, 547-555

TOPIC TAGS: proton accelerator, relativistic particle

ABSTRACT: Current theoretical concepts and experimental data conclusively show that to understand the microcosm further it is necessary to increase the beam intensity of accelerators by a factor of  $10^3$  and produce accelerators with energies up to thousands of Bev's. For the past 5-6 years constant gradient accelerators (500-900 Kev cyclotrons) have appeared to be the best way to produce particles with energies up to 1 Bev (1 Gev) with beam currents of the order of 1 milliampera instead of 1 microampere (as found in synchrocyclotrons). The present report describes the design for a 700-Kev proton cyclotron developed by the Laboratory of Nuclear Prob-

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L 58913-65

ACCESSION NR: AT5007938

blems of the OIYAI jointly with the NIIEFA GKAE SSSR and other scientific research institutes with rated current proton beam up to 500 microamperes. The choice of energy was made on the basis of the fact that at 700 Mev the cross-sections for formation of pions in nucleon-nucleon and nucleon-nuclei collisions are close to maximum, and also because of the possibility of utilizing the electromagnet of the 680-Mev synchrocyclotron of the OIYAI for the new accelerator. The following new problems were considered in the design because there is now no similar operational high-energy accelerator: (a) verification of the linear theory and development of the nonlinear theory of spatial stability and of the phase motion of particles in the accelerator; (b) creation in a large space of a magnetic field with complex configuration and its stabilization with an unusually high degree of accuracy; (c) production of apparatus for the measurement of strongly nonhomogeneous magnetic fields (gradients up to 4000 oe/cm) with an accuracy better than  $10^4$ ; (d) production of high-frequency oscillators with power up to 2 kW at a frequency of 12 megacycles per second (12 Mc), with frequency stability of the order of  $10^{-5}$ , which operate with a resonance system with amplitude of the accelerating high-frequency voltage of up to 100 kilovolts; (e) design of an accelerator and its auxiliary systems which ensure effective operation and maintenance under conditions of high levels of activity; (f) development of a highly effective system for the channelling of proton beams from the accelerator, and also solution of the problems connected with

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ACCESSION NR: AT5007938

producing beams of secondary particles and their channeling and focusing; (g) development of plans for the protection of personnel and instruments from radiation. The paper concludes that the relativistic cyclotron offers wide new possibilities for nuclear research in radiobiology, solid state physics, etc.; Orig. art. has: 7 figures, 3 tables.

ASSOCIATION: (I) Ob'yedinenyyi institut yadernykh issledovaniy, Dubna (Joint Institute of Nuclear Research, Dubna); (II) Nauchno-issledovatel'skiy institute elektrofizicheskoy apparatury imeni D. V. Yefremova GKAE SSSR (Scientific Research Institute of Electrophysical Equipment, GKAE SSSR)

SUBMITTED: 26 May 64

ENCL: 60

SUB CODE: KP

NO REF SovI: 009

OTHER: 002

Card: 3/3

REF ID: A771 CIA W-4/Cambridge-2 107.c1 40  
EXTRACTION #: AT5007952

SEARCHED INDEXED SERIALIZED FILED 0603020839

AUTHORS: Ivanov, Imitrievskiy, V. P.; Ko'iga, V. V.; Polomorzinova, N. I.

TITLE: Nonlinear effects and internal resonances in the relativistic cyclotron

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963.  
Trudy. Moscow, Atomizdat, 1964, 833-839

TOPIC TAGS: relativistic particle, cyclotron, electron oscillation, resonance

ABSTRACT: In the relativistic cyclotron with spatial variation of the magnetic field, a very important role is played by nonlinear effects. In the majority of cases it is the nonlinear effects that determine the choice of the size of the parameters which characterize the structure of the magnetic field. The present report contains the results of a theoretical discussion of the influence exerted by the nonlinear effects upon the motion of particles in the relativistic cyclotron. This problem is treated in connection with the development of the relativistic 700-Mev proton cyclotron (V. S. Glazov, A. A. Lomisov, Yu. N. Zapelezhev, V. F. Imitrievskiy, V. A. Timchenko, B. I. et al., present collection, p. 547). The system of equations which describe the motion of charged particles in a given magnetic field for a "flat" or adiabatically-varying momentum was derived, in the cylindrical sys-

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tem of coordinates, and studied by D. P. Vasilevskaya, et al., (*Vozmushcheniya energiyu*, No. 2, 189 (1960)). The present authors consider simplifying assumptions and discuss

linear terms in the main equations. Use was made of asymptotic methods by V. A. Kondratenko and Yu. A. Mitropol'skiy, *Asymptotic methods in the theory of nonlinear oscillations* (Gostekhizdat, Moscow, 1960).

The results obtained by numerical integration were compared with the results obtained by asymptotic methods. The results of the calculations are given in the tables.

Table I gives the values of the parameters of the system of equations for the case of small values of the parameter  $\epsilon$ .

Table II gives the values of the parameters of the system of equations for the case of large values of the parameter  $\epsilon$ .

1964-66

ACCESSION NR: AT5007952

ASSOCIATION: Ob'yedinenyyi institut yadernogo issledovaniya, Dubna (Joint Institute of Nuclear Research)

SUBMITTED: 26 May 64

NO REF Sov: 003

ENCL: 00

SUB CODE: NP

OTHER: 001

Card 3/3 SP

1. A. A. Pshelenev, V. G. Mitrinov, V. V. Sosedchikov, B.

Effect of space charge on the free oscillation frequency of particles in an

accelerator

UDC 537.585.4.01

1. A. A. Pshelenev, V. G. Mitrinov, V. V. Sosedchikov, B.

Effect of space charge on the free oscillation frequency of particles in an

accelerator. Report No. 1. Institute of Nuclear Physics, USSR Academy of Sciences, Moscow, 1959. 12 pp. (Russian)

menskiy, A. A.; Lebedev, A. N. Atomnaya energiya, 7, 549 (1959). To create strong-accelerators it is important to verify the theoretical conclusions with actual calculations. The main problem is to find the influence of the space charge on the oscillation frequency of particles in the accelerator.

L 2274-66

ACCESSION NR: AT5007943

celerated particles. Pertinent measurements were carried out on a cyclotron with spiral magnetic field for the specific case of molecular hydrogen ions accelerated up to the energy of 12 Mev (Vasilevskaya, D. P., et. al., *Atomnaya energiya*, 8, 1961). The results of the present work shows that the effect of the space charge does not prevent beam intensities of the order of several milliamperes in relativistic cyclotrons. A result of this space charge is the displacement of the main interaction of the accelerated beam. It has been obtained which oscillations, taking account of the space charge on the basis of linear equations for the beam. It is assumed that the particles in a ion dense bunch are uniformly distributed along the azimuth and that the vertical size of the bunch is much smaller than the azimuthal extension. The main topics discussed are: (1) the density of charged particles in a relativistic cyclotron and its influence upon the frequency of the axial oscillations; (2) measurement of the azimuthal extension of the limiting intensity of the internal beam in a relativistic cyclotron. Orig. art.

ASSOCIATION: Ob'yedinenyyi institut Yad. vynkh issledovaniy, Dubna (Joint Institute of Nuclear Research)

SUBMITTED: 26 May 64 65

Card 2/2 DP

ENCL: 00  
NO REF Sov: 004

SUB CODE: NP  
OTHER: 002

I.07115-67 EWT(d)/EWT(m)/EWP(w) IJP(c) EM  
ACC NR: AP6035494 (A) SOURCE CODE: UR/0198/66/002/010/0044/0053

AUTHOR: Strel'bitskaya, A. I. (Kiev); Kolgadin, V. A. (Kiev)

ORG: Institute of Mechanics, AN UkrSSR (Institut mehaniki AN UkrSSR)

TITLE: Investigating the flexure of rectangular plates beyond elastic limit

SOURCE: Prikladnaya mehanika, v. 2, no. 10, 1966, 44-53

TOPIC TAGS: rectangular plate, ~~plastic~~ stress, plastic deformation

ABSTRACT: The behavior of rectangular plates subjected to flexure beyond the elastic limit is analyzed by utilizing the theory of small elastic-plastic deformations, and the method of elastic solutions combined with a finite difference method. The following assumptions are made: a) the regular concepts of the engineering theory of flexure are valid; b) the plate material (either compressible or incompressible) has a sharply expressed yield break; c) the plasticity condition is taken from the energy theory with the effect of transverse forces on tangential stresses omitted; and d) simple loading is considered. The boundaries of plastic zones on the plate surfaces and over its thickness are established in accordance with assumption (c), and expressions describing the relations between stresses and deformations beyond the elastic limit are derived by introducing a variable modulus of strain replacing the modulus of elasticity, so that the stress distributions in elastic-plastic cross sections of the plate can be determined. The equation for elastic-plastic equilibrium

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ACC NR: AP6035494

of a plate element is derived with regard to assumption (b); it contains terms which account for the propagation of plastic stresses. This equation is rewritten in finite differences in a nondimensional form, and solved by successive approximations, taking the elastic solution as the zero approximation. The elastic-plastic state of strain in square and rectangular plates simply supported and clamped on all edges (of both compressible and incompressible material) under uniform lateral loading was investigated by the proposed method. The results (concerning the plastic zones on surfaces and across the thickness, along the axes of symmetry and at the edges, as well as the deflections and bending moments) are given in tables, illustrated by diagrams, and discussed at length, mainly the effects of boundary (support) conditions of plates, and of the plate material (compressible or incompressible) on the development of elastic-plastic zones in the plate. Orig. art. has: 7 figures, 2 tables, and 27 formulas.

SUB CODE: 20/ SUBM DATE: 28Apr66/ ORIG REF: 004/ OTH REF: 001/  
ATD PRESS: 5104

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Card 2/2

KOLGADIN, V.A. (Kiyev)

Determining deformations of an H-beam subjected to bending  
and torsion beyond the elastic limit. Prikl. mekh. 1  
no.10:72-77 '65.

(MIRA 18:12)

1. Institut mekhaniki AN UkrSSR. Submitted April 27, 1965.

KOLGADIN, V.A. [Kolhadin, V.O.] (Kiyev)

Determining the deformations of an I-beam subjected to elastoplastic hindered torsion. Prykl.mekh. 9 no.2:157-166 '63. (MIRA 16:3)

1. Institut mekhaniki AN UkrSSR.  
(Beams and girders)

KOLGADIN, V.A. (Kiyev)

Tensioned torsion of a thin strip beyond elastic limit. Prikl.mekha  
l no.7:132-135 '65. (MIRA 18:8)

I. Institut mekhaniki AN UkrSSR.

KOLGANOV, A.

"Mortar Hardening In The Cold. p. 23" (ARKHITEKTURA I STROITELSTVO) Vol. 2, No. 2, 1953,  
Sofiya, Bulgaria.

SQ: Monthly List of East European Accessions L.C. Vol. 2, No. 11, Nov. 1953, Uncl.

KOLGANOV, A.

Engineer, wrote about new method for lowering artificially the freezing temperature of the lime solution for plastering.

Soviet Source: P: Tekhnika Molodezhi 1 January 1951 Moskva  
Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information Division, Report No. 106537, Unclassified.

KOLGANOV, A.F., inzh.

Exhibition of new building technology in Sverdlovsk. Biul. stroi.  
tekh. 12 no.1:36-37 Ja '55. (MIRA 11:12)

1.PVSV.

(Sverdlovsk--Building--Exhibitions)

KOLGANOV, A.V.

Epidemiology of Botkin's disease in a rural district. Zhur. mikrobiol.,  
epid. i immun. 40 no. 8:130-134 Ag '63. (MIRA 17:9)

1. Iz sanitarno-epidemiologicheskoy stantsii Berezovskogo rayona  
Voronezhskoy oblasti.

KOLGANOV, D.I.

27681

O smene zvbov v shchuki. Priroda, 1949, No. 8, s.70

SO: Knishnaya Letopis, Vol. 1, 1955

GLOBUS, L.M.; ZALESSKIY, V.A.; ISAYEV, K.N.; KOLGANOV, D.I.; VARFOLOMEIEV, F.G., spetsial'nyy red.; EEL'KOVICH, A.V., red.; BRODSKIY, M.P., tekhn. red.

[Hunting and fishing appliances; a handbook] Okhotnich'i i rybolovnye tovary; spravochnik. [By] L.M. Globus 1 dr. Moskva, Gostorgizdat, 1963. 135 p. (MIRA 16:6)

(Fishing--Equipment and supplies)  
(Hunting--Equipment and supplies)

24(5)

## AUTHORS:

Vysenberg, A. O., Smirnitskiy, V. A., SOV/56-35-3-13/61  
Kolganova, E. D., Minervina, Z. V., Pesotskaya, Ye. A.,  
Rabin, N. V.

## TITLE:

Angular Correlations for Positrons of Low Energy in  
 $\pi^+ - \mu^+ - e^+$  Decay (Uglovaya korrelyatsiya dlya pozitronov maloy  
energi pri  $\pi^+ - \mu^+ - e^+$ -raspade)

## PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,  
Vol 35, Nr 3, pp 645 - 648 (USSR)

## ABSTRACT:

After the discovery of the nonconservation of parity  
with weak interaction, several groups of research scientists  
investigated the energy dependence of the angular correlation  
of positrons in  $\pi^+ - \mu^+ - e^+$  decay (Refs 1-3); according  
to Mukhin, Ozerov and Pontekorvo (Ref 4) the connection  
between asymmetry and energy corresponds to the laws  
of the two-component theory, according to which the  
formula (1)

$$\cos \frac{\theta}{3} = \frac{\alpha \lambda}{3} \frac{2\epsilon - 1}{3 - 2\epsilon} \text{ applies, where } \frac{\theta}{3} \text{ denotes the angle}$$

Card 1/4

Angular Correlations for Positrons of Low Energy in  $\pi^+ - \mu^+ - e^+$  Decay SOV/56-35-3-13/61

between the direction of myon spin and the direction of the emission of the positron in  $\mu^+ - e^+$  decay.  $E$  denotes the energy of positrons in units of its maximum energy,  $\lambda$ -a parameter of the theory (which is determined from the ratio between interaction constants),  $\alpha$ -a coefficient which shows what part of myons is polarized at the instant of decay. In the present paper the correlation was not investigated in space, but in the plane, so that the formula used here for  $\cos \theta$  is distinguished from (1) by the fact that the first factor of the right side is  $\alpha\sqrt{2}$ . A photo-emulsion plate NIKFI-R of  $400\mu$  thickness was used for the investigations; it was exposed to a  $\pi^+$ -meson beam of the synchrocyclotron of the OIYAI (Obyedinennyj institut yadernykh issledovanij = United Institute for Nuclear Research) (cf.also reference 2). Results are, essentially, given in two tables.

1) Series of measurements, 1099 positron traces:

Card 2/4

Angular Correlations for Positrons of Low Energy in  
 $\pi^+ - \mu^+ - e^+$  Decay

SOV/56-35-3-13/61

$\theta$	$\epsilon$ :	0-0,3	0,3-0,6	0,6-0,9	0,9
0-180°	number of particles n	46	333	440	280
	$\cos\theta \pm 0,7/\sqrt{n}$	+0,18 ± 0,10	0,00 ± 0,04	-0,05 ± 0,03	-0,09 ± 0,04
0 - 60°	n	34	231	300	198
120-180°	$\cos\theta \pm 0,85/\sqrt{n}$	0,30 ± 0,15	0,00 ± 0,06	-0,06 ± 0,05	-0,16 ± 0,06
	2. Series of measurements, 8000 $\pi^+ - \mu^+ - e^+$ decay events, of which 200 with $\epsilon < 0,3$				
$\theta$	$\epsilon$ :	0-0,3	0,3-0,6		
0-180°	n	201	499		
	$\cos\theta$	0,07 ± 0,05	0,01 ± 0,03		
0 - 60°	n	141	337		
120-180°	$\cos\theta$	0,13 ± 0,07	0,01 ± 0,05		

( $\theta$  is the angle between the direction of emission of the myon and that of the positron). Similar measurements have recently been carried out by Pershin et al (Ref 7) in the propane-bubble-chamber. The authors in conclusion thank A.I.Alikhanov for his interest in this work

Card 3/4

Angular Correlations for Positrons of Low Energy in SOV/56-35-3-13/61  
 $\pi^+ - \mu^+ - e^+$  Decay

and A.P.Birzgal for calculations. Moreover, they express their gratitude to the collaborators of the testing group for evaluating a large number of plates. There are 2 tables and 7 references, 5 of which are Soviet.

SUBMITTED: May 31, 1958

Card 4/4

21. (7)  
AUTHORS:Vayzenberg, A. O., Smirnitskiy, V. A., Sov/56-37-1-63/64  
Kolganova, E. D., Rabin, N. V.

TITLE:

The Energy Dependence of the Spatial Asymmetry of Positrons in  
 $\pi^+ \mu^+ e^+$  Decay (Zavisimost' ot energii prostranstvennoy asimmetrii pozitronov pri  $\pi^+ \mu^+ e^+$ -raspade)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37,  
Nr 1, pp 326 - 328 (USSR)

ABSTRACT:

The present "Letter to the Editor" is a continuation of a number of other works (Refs 1-3). The asymmetry coefficient  $a$  of this reaction was determined according to the equation  $dN = (1 + \cos \vartheta) d\Omega (\vartheta)$  angle between the direction of the departure of muon and electron,  $d\Omega$  - solid angle element) as amounting to  $0.077 \pm 0.012$  for NIKFI-R emulsions; it increases to  $0.28 \pm 0.02$  if the emulsion is located in a magnetic field of 17 kG. The data are mean values obtained by measurements of the entire spectrum. Investigations of the energy dependence of  $a$  were carried out by means of a NIKFI-R photoemulsion pile in the perpendicular magnetic field of 17 kG; irradiation was carried out on the synchrocyclotron of the OIYaI (Joint Institute of Nuclear

Card 1/3

The Energy Dependence of the Spatial Asymmetry of      Sov/56-37-1-63/64  
Positrons in  $\pi^+ \rightarrow \mu^+ \rightarrow e^+$  Decay

Research). Positron energy was measured by means of the method of multiple scattering, for which purpose the microscopes Kornitska MS-2 and MBI-9 were used. Part of the measurements was carried out by means of a semiautomatic device. 565 traces were selected according to certain criteria, which are enumerated. Under these conditions it holds that  $a(\varepsilon) = 1.27 \frac{N_f - N_b}{N_f + N_b} \pm (1.27^2 - a^2(\varepsilon))$ , where  $N_f$  denotes the number of forward decays,

$\sqrt{N_f + N_b}$

$N_b$  the number of backward decays. The  $N_f$  and  $N_b$  are given in a table for 10 energy intervals between 0 and 1.1. A diagram shows the dependence of  $a(\varepsilon)$  on the positron energy  $\varepsilon$ . The drawn-in curve represents  $a(\varepsilon)$  according to the theory of the two-component neutrino:  $a(\varepsilon) = 3.0.28(1-2\varepsilon)/(2\varepsilon-3)$ ; (here  $0.28 \pm 0.02$  is the value of the asymmetry coefficient at 17 kG). The dotted curves show the energy dependence of  $a$  obtained from the statistical errors of energy measurement and from the bremsstrahlung in experimental conditions (upper curve: 10% dispersion

Card 2/3

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CIA-RDP86-00513R000723820015-3

KOLGANOV, E. D.; RABIN, N. V.

Measuring noises in the MBI-9 microscope. Prib. i tekhn. eksp. no. 5:134  
S-0 '60.  
(Electron microscope--Noise) (MIRA 13:11)

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723820015-3"

86890

*24.6900*S/056/60/039/005/004/051  
B029/B077

## AUTHORS:

Vaysenberg, A. O., Kolganova, E. D., Smirnitskiy, V. A.

## TITLE:

Study of the Asymmetry in the Decay of Negative Muons in  
a Nuclear Emulsion

## PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 39, No. 5(11), pp. 1198 - 1200

TEXT: P. M. Shmushkevich (Ref.2) and V. A. Dzhrbashyan (Ref.3) showed that negative muons lose most of their polarization in mesic atoms during cascade transitions. This agrees with experimental values of A. E. Ignatenko et al. (Ref.4). The authors determined the coefficient of asymmetry of the  $\mu \rightarrow e$  decay in a nuclear emulsion without a magnetic field ( $H < 0.1$  oe) and in a strong magnetic field ( $H = 11$  koe) parallel to the negative muon beam. Emulsion films of the type НИКФИ-Р (NIKFI-R) were bombarded with a negative muon beam in the synchrocyclotron of ОИЯИ (Joint Institute of Nuclear Research). The initial polarization of the negative muons probably does not differ considerably from the polarization of the positive muons, which according to

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Study of the Asymmetry in the Decay of  
Negative Muons in a Nuclear Emulsion

S/056/60/039/005/004/051  
B029/B077

A. I. Mukhin, Ye. B. Ozerov, and B. Pontekorvo (Ref.5), is  $0.81 \pm 0.11$ .  
The distribution of decay electrons with respect to the direction of the negative muon beam is described by a relation of the form  $1 + \cos \vartheta$ .  
The authors observed a total of 9279 decays without applying a magnetic field, and 3403 decays in a magnetic field of 11 koe. Conditions and results of measurements are given in the following table:

Magnetic field strength H	$< 10^{-1}$ oe	11 koe
Number of decays	backward 4580	1707
Coefficient of asymmetry	forward $+0.02 \pm 0.017$	$1696$
Number of observers	$\frac{6}{6}$	$0.00 \pm 0.025$
Consistency	$\chi^2 \sim 8$	$\chi^2 \sim 25$

Within the limits of the statistical error there is no noticeable asymmetry, and the magnetic field has no influence on the asymmetry, either. The negative muons are slowed down by the light (C, N, O) and heavy components (Ag, Br) of the emulsion with about the same frequency.

Card 2/3

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Study of the Asymmetry in the Decay of  
Negative Muons in a Nuclear Emulsion

S/056/60/039/005/004/051  
B029/B077

There is fairly good agreement between the results of several observers, especially for  $H = 0$ . Further measurements did not establish a noticeable asymmetry either. For  $H = 11$  koe,  $a = 2 \cos \psi + 1.57/\sqrt{N}$  increases slightly at the end of the spectrum. There is practically no asymmetry in the decay of negative muons in a nuclear emulsion of the type NIKFI-R, independently of the external magnetic field. Thus, it is impossible to use the method of photoemulsions when observing such secondary effects which are related to the polarization of negative muons, such as the asymmetric emission of protons in stars which appear during the absorption of negative muons by a nucleus, and also the asymmetric departure of electrons from  $\beta$  active recoil nuclei which are created by such an absorption. The authors thank N. V. Rabin and Ye. A. Pesotskaya for assisting in the measurements. There are 1 figure, 1 table, and 7 references: 5 Soviet, 1 US, and 1 Dutch.

SUBMITTED: May 28, 1960

Card 3/3

BRUNGARDT, V.I., mekhanik; KOLGANOV, G.A., slesar'

Belt feed for bricks to be installed between two conveyers. Suggested by V.I.Brunhardt, G.A.Kolganov. Rats.1 izobr.predl.v stroi. no.13:41-43 '59. (MIRA 13:6)

1. Stroitel'nyy uchastok Chelyabinskogo tresta Soyuzteplostroy  
Ministerstva stroitel'stva RSFSR.  
(Bricks—Transportation)  
(Conveying machinery)

ZHURAVLEV, I.P.; KOLGANOV, G.S.; SERVETNIK, V.M.

Using sinter in steelmaking in large-capacity open-hearth furnaces. Met. i gornorud. prom. no.6:64-65 N-D '64.

(MIRA 18:3)

KOLGANOV, G.S.; TARAPUROV, N.P.; SERVETNIK, V.M.; SINITSA, I.I.

Developing and adopting a procedure for the production of chemically  
capped steel. Stal'. 22 no.11:994-996 N '62. (MIRA 15:11)  
(Steel ingots)

KOZIN, G.N., inzh.; KOLGANOV, G.S., inzh.; TARAFUROV, N.P., inzh.;  
SAVIN, N.M., inzh.

Rapid method for the fritting of a 600-ton open-hearth furnace.  
Met.i gornorud.prom. no.5:76-78 S-0 '62. (MIRA 16:1)  
(Open-hearth furnaces--Maintenance and repair)

KORKOSHKO, N.M., inzh.; KOLGANOV, G.S., inzh.; KRIVCHENKO, Yu.S., inzh.; SERVETNIK, V.M., inzh.

Comparison of material balances in oxygen converters and large-capacity open-hearth furnaces with the use of oxygen. Stal' 23 no. 9:788-791 S '63.  
(MIRA 16:10)

POGORELYY, V.P.; KORKOSHKO, N.M.; KOLGANOV, G.S.

Intensification of steelmaking in open-hearth furnace plants. Stal'  
23 no.7:606-607 Jl '63.  
(MIRA 16:9)

1. Krivorozhskiy metallurgicheskiy zavod.  
(Steel—Metallurgy)  
(Open-hearth furnaces—Design and construction)

KOLGANOV, G.S.; PAVLENKO, I.I.; GETMANETS, Zh.S.; CHERNEGA, I.L.; SKOBKIN, M.F.

Using trays with ceramic inserts for the top pouring of steel.  
Stal' 23 no.6:515-516 Je '63.

(MIRA 16:10)

1. Krivorozhskiy metallurgicheskiy zavod.

POGORELYY, V.P.; KORKOSHO, N.M.; KOLGANOV, G.S.; MATYAZH, N.N.

Efficient practices in deoxidizing steel smelted in high-capacity open-hearth furnaces. Met. i gornorud. prom.  
no.1:64-66 Ja-F '64.

(MIRA 17:10)

KOLGANOV, C.S.; ZHURAVLEV, I.P.; KORKOSHIKO, N.M.; SERVETNIK, V.M.;  
TARAFUROV, N.P.

Introduce the production of chemically capped steel. Metallurg  
10 no.8:13-15 Ag '64. (MIRA 17:11)

1. Krivorozhskiy metallurgicheskiy zavod.

1-65 EWT(m)/EWA(d)/EWP(t)/EWP(b) LP(c) JD

ATION NR: AP5005077

S/0130/65/000/002/0011/0012

WORK: Kolganov, G. S.; Tarapurov, N. P.; Servetnik, V. M.; Poltavets, Z. I.

Characteristics of rimmed steel production in 600-ton furnaces

(0 - 14)

15

JOURNAL: Metallurg, no. 2, 1965, ii-12

14

TOPIC: rimmed steel, blast furnace, steel production, open hearth furnace,  
smelting, manganese content, steel segregation

13

NR: AP5005077

for St. 8. The upper 10-15% of the ingot contained the maximal concentration of segregating elements. The degree of segregation of carbon, sulfur, and manganese in the steels was 120, 320, and 310%, respectively. Manganese hardly segregates at all. Chemical capping of the ingots proved to be a good method to eliminate segregation of the elements. It was concluded that production of rimmed steels in large open-hearth furnaces provides the required quality of the metal.

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CIA-RDP86-00513R000723820015-3

TYPE: 00

SI: 000

ENCL: 00

OTHER: 000

SUB CODE: IE, M

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"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723820015-3

KOIGAROV, G.N.; SVET, V.A.

Stoppers last longer. Metallurg 10 no.7:28-29 Jl '65.

(MIRA 18:7)

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CIA-RDP86-00513R000723820015-3"

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723820015-3

KOLGANOV, G.S., Inzne; KITAYEV, A.T.

Mastering the rapid top casting of steel. Stan' 25 no. 3-224.  
228 Mr '65.  
(MIRA 184)

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723820015-3"

BABENYCHEV, M.A.; HOLCANOV, C.S.

Using oxygen to blow the bath of 600-ton open-hearth furnaces.  
Met. i gornorud. prom. no. 6:14-15 N-D '65. (MIRA 18:12)

POGORELYY, W.P.; KOIGANOV, G.S.; GORBENKO, K.N.; SERVETNIK, V.M.;  
TOVAROVSKIY, I.G.

Desulfuration of pig iron before steel smelting. Met. i  
gornorud. prom. no.4:6-7 Jl-Ag '65. (MIRA 18:10)

KOLGANOV, I., jurist

Pensions on preferential terms. Sov. profsoiuz 18 no.1:44-45 Ja '62.  
(MIRA 15:2)

(Pensions)

KOLGANOV, I.

Factory and Plant Local Committee on pensions. Okhr. truda i  
sots. strakh. no.4:31 Ap '63. (MIRA 16:4)

(Works councils) (Pensions)

TOPOLEV, A.; KOLGANOV, I., yurist

Our consultations. Sov. profsoiuzy 18 no.4:45-46 F '62.  
(MIRA 15:3)  
(Leningrad--Work councils) (Installment plan)

KOLGANOV, I.

How to verify the length of service with documents.  
Sov. profsciuz 18 no.21:46-47 N '62. (MIRA 15:11)  
(Labor passports)

KOLGANOV, Energiya Makarovna; KOLGANOV, Ivan Pavlovich; IVANOV, Yuryi  
Nikolayevich; SLUCHEVSKIY, G., red.; NIKOLAYEVA, T., tekhn. red.

[A trip across Kaliningrad Province] Puteshestvuite po Kalinin-  
gradskoi oblasti. Kaliningrad, Kaliningradskoe knizhnoe izd-vo,  
1961. 220 p. (MIRA 14:10)  
(Kalininograd Province--Description and travel)

KOLGANOV, Il'ya Pavlovich; NOVOSPASSKIY, V.V., red.; ANDREYEVA, L.S.,  
tekhn. red.

[Aid for the Factory and Plant Local Committee on pension  
problems] V pomoshch' komissii FZK po pensionnym voprosam.  
Moskva, Profizdat, 1962. 62 p. (Bibliotekha profsoiuznogo  
aktivista, no.11(35)) (MIRA 15:11)

(Pensions)

KUTSENKO, G.; DUVANKOV, G.; AREFINA, V. (Permskaya obl, st. Utes); KOLGANOV, I.,  
yurist

Editor's mail. Okhr. truda i sots. strakh. 5 no.8:44-45 Ag '62.

(MIRA 15:7)

1. Vneshtatnyy tekhnicheskiy inspektor Magadanskogo oblastnogo komiteta  
professional'nykh soyuzov (for Kutsenko). 2. Rukovoditel'  
obshchestvennogo soveta pri otroke okhrany truda zhurnala "Okhrana  
truda i sotsial'noye strakhovaniye" (for Duvankov).

(Employer's liability)

(Maternal and infant welfare—Law and legislation)

KOLGANOV, K. G.

27795. KOLGANOV, K. G. — Vydeleniye biologicheskogo tsennogo zerna v protsesse obmolota. Selektsiya i semenovodstvo, 1949, No. 9, S. 44-49

SO: Letopis' Zhurnal'nykh Statey, Vol. 37, 1949

KOLGANOV, K. G.,

"The Separation of Biologically Valuable Seeds in the Process of Threshing." Dr Agr Sci, Moscow Agricultural Acad imeni Timiryazeva, Moscow, 1953. (RZhBiol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

So: Sum. No. 481, 5 May 55

TRESKOV, Georgiy Dmitriyevich; LYUBIMOV, A. I.; KUEYSHEV, V.A.;  
SERGEYEV, M.P., prof., retsentent; KOLGANOV, K.G., prof.,  
red.; DUGINA, N.A., tekhn. red.

[Calculations for grain harvesting machines] Raschet zerno-  
uborochnykh mashin. Pod red. K.G.Kolganova. Izd.2., perer.  
Moskva , Mashgiz, 1961. 214 p. (MIRA 15:7)

1. Kafedra sel'skokhozyaystvennykh mashin Chelyabinskogo in-  
stituta mekhanizatsii i elektrifikatsii sel'skogo khozyaystva  
(for Terskov).

(Grain--Harvesting)

KOLGANOV, K.G.; BARVENKO, P.I.

The SKD combine for two-stage threshing. Biul.tekh.-ekon.inform.-  
Gos.nauch.-issl.inst.nauch.i tekhn.inform. no.11:79-81 '62.

(MIRA 15:11)

(Threshing machines)

~~KOLGANOV, K.S., general-leytenant, red.; MOROZOV, B.N., polkovnik, red.; MEZHVERITSKAYA, N.P., tekhn. red.~~

[Development of the tactics of the Soviet army during World War II (1941-1945)] Razvitiye taktiki Sovetskoi Armii v gody Velikoi Otechestvennoi voyny (1941-1945 gg.). Pod obshchey red. K.S. Kolganova. Moskva, Voen. izd-vo M-va obor. SSSR, 1958. 63 p. (MIRA 11:10)

1. Krasnosnamennaya ordena Lenina i ordena Suvorova 1-y stepeni Voennaya Akademiya imeni M.V. Frunze. Kafedra istorii voennogo iskusstva.

(Tactics)

KOLGANOV, K., general-leytenant

Where officers are forged. Voen.znan. 34 no.12:8-9 D '58.  
(MIRA 12:2)  
(Military education)

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723820015-3

KOLGANOV, K., general-leytenant

Fortieth anniversary of a trice decorated academy. Voen.vest. 38  
no.12:16-25 D '58. (MIRA 12:1)  
(Military education)

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CIA-RDP86-00513R000723820015-3"

KOLGANOV, L. A.

USSR/Farm Animals. Sheep and Goats.

Q

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78744.

Author : Kolgnov, L. A.; Longinov, N. V.  
Inst :

Title : Isn't It Time to Differentiate Between the Breeds of  
Sheep? An Order of Discussion.

Orig Pub: Zhivotnovodstvo, 1957, No 9, 61-63.

Abstract: In connection with the community of origin and  
with the similar useful farm qualities of the  
Caucasian Stavropol, and Salsk and other breeds,  
it is proposed to consider them as separate  
types of a single breed of Soviet merino, which  
would facilitate work in fine-wool sheep breeding.

Card : 1/1

29

KOLGANOV, Mikhail Vasil'yevich; CHERNOMORDIK, D.I., red.

[National income of the U.S.S.R.] Narodnyi dokhod SSSR. Pod  
red. D.I.Chernomordik. Moskva, Gos.sotsial'no-ekon.izd-vo,  
1940. 109 p. (MIRA 14:1)

(Income)

KOLGANOV, M. V.

USSR

"Resolutions of the Fourth Plenary Session of the Central Council of Trade Unions"

SO: Current Digest of the Soviet Press, Vol. 2, No. 28, 1950, p. 51 (In CIA Libr.)

KOLGAI<sup>OV</sup>, M.

Currency Question

Problem of utilization of commodity and money media during the early years of Soviet power. Vop.ekon. 5, No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1953, Uncl.

2

KOLGANOV, N. ✓.

National income of the United States for the period 1929-1954. Vop.  
ekon.no.12:70-88 D '56.  
(United States--Income) (MLRA 10:2)

KOLGANOV, M.V.

ABRAMOV, V.A.; ALEKSEYEV, A.N.; AL'TER, L.B.; ARAKELYAN, A.A.; BAKIANOV, G.I.;  
BASOVA, I.A.; BLYUMIN, I.G.; BOGOMOLOV, O.T.; BOR, M.Z.; BREGEL',  
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## AUTHORS:

Mikhaylov, V. A., Shevchenko, V. B.,  
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## TITLE:

Investigation of the Extraction of Protactinium by Mono-and  
Diisoamyl Phosphoric Acids (Issledovaniye ekstraktsii  
protaktiniya mono- i diizoamilfosfornoy kislotami)

## PERIODICAL:

Zhurnal neorganicheskoy khimii, 1958, Vol. 3, Nr 8, pp. 1959-  
1964 (USSR)

## ABSTRACT:

In the present paper the results of detailed investigations on the extraction of protactinium by mono- and diisoamyl phosphoric acid from nitric acid solutions are given. The dependence of the extraction of protactinium by mono- and diisoamyl phosphoric acid on the concentration of the extractive and the concentration of  $H^+$  and  $NO_3^-$  in the aqueous phase were investigated.

It is shown that in the extraction with dialkyl phosphoric acid the distribution coefficient of protactinium is proportional to the square of the concentration of the extractive in the organic phase. The concentration of nitric acid ions is of no importance in the extraction of protactinium. From the experimental results may be concluded that in the extraction of protactinium

Card 1/2

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SOURCE DATE: 09/04/83/27/01/3095/2100

AUTH R: Radushkevich, L. V.; Kolganov, V. A.

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29  
B

ANALYST: Institute of Physical Chemistry, AN USSR, Moscow (Institut fizicheskoy khimii AN SSSR)

TITLE: Study of aerosol filtration by means of a model filter

SOURCE: Kolloidnyy zhurnal, v. 27, no. 1, 1965, 95-100

TOPIC TAGS: polystyrene, filtration, aerosol

ABSTRACT: A design of a model filter was developed and tested for the purpose of studying aerosol filtration. The filter consists of a large number of sections, each containing from 500 to 1200 polymer fibers with a mean diameter of about  $1.5 \mu$ .

Experiments on the filtration of a polydisperse polystyrene aerosol led to the derivation of a relation between the partial breakthrough coefficients and the particle size. A maximum in this dependence was found for particles  $0.2\text{-}0.3 \mu$  at a flow rate of 0.4 cm/sec; this maximum shifted toward smaller particles as the flow rate increased.

Variation in the number of sections and in the degree of their filling, and also repeated applications of fibers by the same technique showed that model filters of this design give reproducible results.

Card 1/2

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A calculation of the efficiency of deposition on a single fiber with an average diameter of  $\sim 1.5 \mu$ , based on the breakthrough coefficients obtained, showed that this efficiency remains virtually unchanged from a filling density of  $\sim 33$  fibers per mm to a density of  $\sim 75$  fibers per mm, i.e., it that it is independent of the mutual interaction of the neighboring fibers of the filter. The authors thank V. N. Pechenov and V. G. Sazonova for preparing the model and assembling the filters. Orig. art. has: 5 figures, 2 tables, and 3 formulas. [JPRS]

SUB CODE: 06, 11 / SUBM DATE: 15May63 / ORIG REF: 004 / OTH REF: 002

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